

WHAT IS CLAIMED IS :

1 – A radiation diversity antenna consisting of a radiating element of the slot-line type coupled electromagnetically to a feed line, wherein the radiating element consists of arms in a tree structure, each arm having a length equal to $k\lambda_s/2$ where k is an identical or different integer from one arm to the next and λ_s is the guided wavelength in the slot-line constituting the arm, at least one of the arms comprising a switching means positioned in the slot-line constituting the said arm in such a way as to control the coupling between the arm and the feed line (6) as a function of a command.

2 – The antenna of claim 1, wherein each arm comprises a switching means.

3 – The antenna of claim 1, wherein the switching means is positioned in an open-circuit zone of the slot.

4 – The antenna of claim 2, wherein the switching means is positioned in an open-circuit zone of the slot.

5 – The antenna of claim 1, wherein the switching means consists of a diode, a transistor arranged as a diode or an MEMS (Micro Electro Mechanical System).

6 – The antenna of claim 1, wherein each arm has a length which is delimited by an insert positioned in a short-circuit plane.

7 – The antenna of claim 5, wherein the insert is placed at the level of the junctions between arms.

8 – The antenna of claim 1, wherein the tree structure has an H or Y shape or one which is an association of these shapes.

9 – The antenna of claim 1, wherein the antenna is produced by microstrip technology or by coplanar technology.

10 – The antenna of claim 1, wherein the length of the slot-lines is chosen so as to produce frequency diversity.